

PATENT ABSTRACTS OF JAPAN

(11)Publication number : 2000-322786
(43)Date of publication of application : 24.11.2000

(51)Int.Cl. G11B 15/02
H04N 5/76
H04N 7/025
H04N 7/03
H04N 7/035

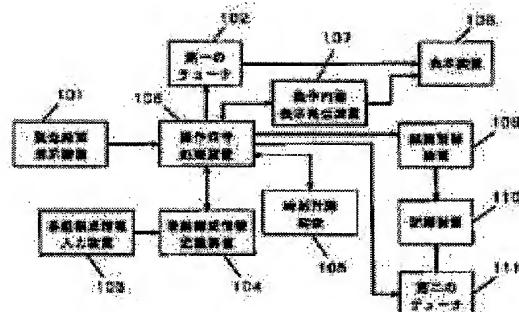
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(54) VIDEO AND SOUND SIGNAL RECORDING DEVICE

(57)Abstract:

PROBLEM TO BE SOLVED: To enhance operability by enabling setting the completing time of a broadcast program which is being watched at present automatically while using broadcast program organization information to enable a video recording completing processing surely even when a user does not set a video recording completing time.

SOLUTION: An operation signal processor 106 instructs the starting of a video recording processing to a video recording controller 109 corresponding to the instruction from an agent video recording instructing device 101 and also retrieves a broadcast program which is stored in a broadcast program organization storage device 104 and which is watched by a user at present from a broadcasting station which is being selected by a first tuner 102 at present and a present date and time from a time measuring device 105. Then, when the processor 106 obtains the completing time of the pertinent program, it gives an instruct to the controller 109 so as to perform the video recording completing processing at the completing time of the program. Since this device can set the completing time of the program which is watched at present automatically by using the broadcast program organization information in this manner, the user becomes possible to omit the setting of the video recording completing time and can make a video recording to be completed surely even at an agent video recording request.



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CLAIMS

[Claim(s)]

[Claim 1] Video voice signal recording equipment comprising:

An urgent recording indicating device for meeting a user's urgent recording demand.

The first tuner that receives an electric wave broadcast from each broadcasting station, and outputs a video signal and an audio signal.

A programming information storage device which accumulates and manages programming information acquired with a programming information input device and said programming information input device for broadcast schedule information on a program for every broadcasting station to come to hand.

A time measuring device which can measure and notify the present date and time, Based on a requirement signal from said urgent recording indicating device, it directs to start picture recording processing to a recording controller, A broadcasting station which it directed that tuned in the office as a broadcasting station which said first tuner has tuned in where the second tuner is the same, and said first tuner has tuned in, If a program applicable out of said programming information storage device is detected, finish time of a program which is going to carry out the present urgent recording comes to hand and program finish time comes from the present date and time which came to hand from said time measuring device, A manipulate signal processing unit which directs to suspend picture recording processing to a recording controller, An operation label generator which outputs a processing process of said manipulate signal processing unit as a video signal, A display device which compounds and displays a video signal which said first tuner device outputs, and a video signal which said operation label generator outputs, A recording controller for performing picture recording processing based on a control signal from said manipulate signal processing unit, Recording equipment which records a video signal with which said second tuner outputs broadcast tuned in with the first tuner based on the second tuner for receiving the same contents, and directions from said recording controller, and an audio signal.

[Claim 2] Video voice signal recording equipment comprising:

An urgent recording indicating device for meeting a user's urgent recording demand.

A tuner which receives an electric wave broadcast from each broadcasting station, and outputs a video signal and an audio signal.

A programming information storage device which accumulates and manages programming information acquired with a programming information input device and said programming information input device for broadcast schedule information on a program for every broadcasting station to come to hand.

A time measuring device which can measure and notify the present date and time, Information on a broadcasting station which it directed that started picture recording processing to a recording controller based on a requirement signal from said urgent recording indicating device, and said tuner has tuned in, If a program applicable out of said programming information storage device is detected, finish time of a program which is going to carry out the present urgent recording comes to hand and program finish time comes from the present date and time which came to

hand from said time measuring device, A manipulate signal processing unit which directs to suspend picture recording processing to a recording controller, An operation label generator which outputs a processing process of said manipulate signal processing unit as a video signal, A display device which compounds and displays a video signal which said tuner outputs, and a video signal which said operation label generator outputs, A recording controller for performing picture recording processing based on a control signal from said manipulate signal processing unit, and recording equipment which records a video signal which said tuner outputs, and an audio signal based on directions from said recording controller.

[Translation done.]

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DETAILED DESCRIPTION

[Detailed Description of the Invention]**[0001]**

[Field of the Invention] This invention receives broadcast and relates to the equipment which displays or records the contents.

[0002]

[Description of the Prior Art] Conventionally, in VTR or a television with a built-in VCR, the timed recording reserving function which almost all models required with the clock function occurs, and it can be said now that the program of the channel which the time set up beforehand specified is recorded. When viewing and listening must be interrupted by sudden going out, a telephone, etc. during viewing and listening of a program, the program recording function called the "one-touch timer" for starting recording hurriedly and "easy reservation" is carried, and it may be.

[0003] When starting such sudden recording, the function which is dramatically difficult for setting up the end time of the program correctly, and carries out a recording end automatically with the end of a program is just going to demand dramatically. The thing of distinguishing the end of a program automatically and ending picture recording processing by change of a broadcasting format like (JP,9-167392,A) is already devised. Conventional video voice signal recording equipment is explained below.

[0004] Drawing 3 shows the composition of conventional video voice signal recording equipment. In drawing 3, the urgent recording indicating device of 301 is an instruction input means for directing to start recording suddenly, when it thinks that a user wants to record the program to which it is viewing and listening now. The tuner of 302 restores to the received electric wave, and outputs a video signal and an audio signal.

[0005] The broadcasting format sensing device of 303 is for detecting whether broadcast is broadcast after two nations, it is a stereophonic broadcast, or it is monaural broadcast based on the broadcasting signal which the tuner received. The manipulate signal processing unit of 304 operates the recording device 308, and makes picture recording processing start at once based on the recording directions directed from the urgent recording indicating device of 301. The broadcasting format simultaneously detected by the broadcasting format sensing device 303 is stored in the broadcasting format memory storage 305.

[0006] In the broadcasting format comparing device of 306, the broadcasting format memorized by the broadcasting format memory storage 305 and the broadcasting format which continues being outputted from a broadcasting format sensing device are supervised, and when a broadcasting format changes, the contents are notified to the manipulate signal processing unit 304. When the state where the duration time of change of the broadcasting format notified from the broadcasting format comparing device 306 is, and is measured with the time continuation equipment of 307 in the manipulate signal processing unit 304, and broadcasting formats differ beyond in fixed time continues, Broadcast is reflected in the following program, judges that the program for the purpose of recording was completed, and directs to suspend the recording controller 308. The recording equipment of 309 records the video signal and audio signal which the tuner 302 outputs based on directions of the recording controller of 308.

[0007]

[Problem to be solved by the invention] However, in the above-mentioned conventional composition, since the broadcasting format of the next program of the program to which it is viewing and listening now cannot judge the end of the present program correctly when it is the same as the broadcasting format of the present program, picture recording processing is not completed at the time of the end of a program. Or when a broadcasting format changes in the middle of a program, depending on the duration time, an erroneous decision may be carried out to the end of a program. Thus, since the end decision of a program is dependent on the change of a broadcasting format instead of the original organization information of a program, there are many possibilities of malfunctioning and a user cannot call it what can be used in comfort.

[0008] Since there was no telling whether a program continues in the back, at the time of setting out and storage capacity of recording equipment required in order to record all programs could not be estimated beforehand, there was a possibility that the program recording by capacity lacks might go wrong. This invention solves the above-mentioned conventional problem, can set up the end time of a program correctly and certainly, and provides the video voice signal recording equipment which can record a desired program correctly and certainly.

[0009]

[Means for solving problem] A programming information storage device which accumulates and manages the programming information acquired with a programming information input device and said programming information input device for the video voice signal recording equipment of this invention to obtain the broadcast schedule information on the program for every broadcasting station, A time measuring device which can measure and notify the present date and time, If a program applicable out of said programming information storage device is detected, the finish time of the program which is going to carry out the present urgent recording comes to hand and program finish time comes, A recording controller is equipped with the manipulate signal processing unit which directs to suspend picture recording processing, and when starting the recording of the program to which it is viewing and listening now, even if a user does not set up the finish time of the program, picture recording processing can be terminated automatically and correctly.

[0010]

[Mode for carrying out the invention] Hereafter, each embodiment of this invention is described based on drawing 2 from drawing 1.

[0011] (Embodiment 1) The 1st embodiment of this invention is described below, referring to Drawings. In drawing 1, an urgent recording indicating device and 102 101 The first tuner, 103 — a programming information input device and 104 — a programming information storage device and 105 — a time measuring device and 106 — a display device and 109 show a recording controller, 110 shows recording equipment, and, as for an operation label generator and 108, a manipulate signal processing unit and 107 show the second tuner 111. It is with drawing 1 about the video voice signal recording equipment constituted as mentioned above, and the operation is explained.

[0012] In the urgent recording indicating device of 101, it is for directing that to record the program under present viewing and listening. This is specifically realizable as one button on the front face of a main part, or a remote control. It may be the same as that of the thing for realizing the "one-touch timer" and the "easy timed recording" with which conventional VTR and television with a built-in VCR are equipped.

[0013] That is, when viewing and listening must be interrupted for a telephone sudden while viewing and listening to television, a visitor, etc., it is a control means for starting recording hurriedly. This button may be made to carry out recording start directions by carrying out the depression of two or more buttons to turn simultaneous so that it may not push by mistake, when usually unrelated.

[0014] Or it may be made to direct by GUI displayed on a screen. It may be made to also direct the GUI by touching a keyboard [not only a remote control but], mouse, or screen top with a finger. Or neither GUI nor a button is used again, but it may enable it to direct by speech recognition, a gesture gesture, sign language, etc. The first tuner of 102 receives a broadcasting electric-wave, gets over, outputs a video signal and an audio signal, and can view and listen to

them with the display device of 108. When a user usually enjoys himself as television, with this tuner, it receives, views and listens to broadcast.

[0015]The programming information input device of 103 is a thing in order to obtain the schedule of the program of the schedule broadcast from each broadcasting station. As a actual realization method, it may be made to download from networks, such as the Internet, and may receive from data broadcasting sent by the electric wave received with a tuner. Or it may be with portability storages, such as a floppy disk, and what was inputted by another apparatus may be used. It does not suit, even if a user inputs actively with a keyboard or a mouse again. Although the start time or finish time of each program for every broadcasting station needs to be contained, about the title or detailed content of a program, you may not be in the programming information which comes to hand here.

[0016]The programming information storage device of 104 memorizes the programming information which came to hand with the programming information input device of 103, from the date, time, and a broadcasting station, can search an applicable program and can notify the finish time of the applicable program. The time measuring device of 105 is a clock with what is called a calendar function, and can notify the present date and time. Although GUI for setting up time is required, even if they do not use special composition, they are realizable by using the manipulate signal processing unit of 106, the operation label generator of 107, and the display device of 108. Or when time information can be obtained from data broadcasting sent by the electric wave received with a tuner, it may be used, and time may be set up and amended automatically.

[0017]The manipulate signal processing unit of 106 is for starting recording corresponding to the directions from the urgent recording indicating device of 101, and it directs to start picture recording processing promptly to the recording controller of 109. It asks the programming information storage device of 104 from the present date and time which are obtained from the broadcasting station tuned in with the first tuner of 102 now, and the time measuring device of 105, the program to which the user is viewing and listening now is searched, and the finish time of an applicable program is obtained. When the program finish time comes, the stop of picture recording processing is directed to the recording controller of 109.

[0018]It may control to turn off the power supply of this whole equipment at the same time it suspends picture recording processing at this time. In order to specify a broadcasting station required in order to search a program in a manipulate signal processing means, it is necessary to take correspondence with the frequency which has tuned in the tuner, and the tuned-in broadcasting station but, and. When a broadcasting station can specify automatically by data broadcasting which accompanies contents of broadcast or it, it is not necessary to perform setting out by a user beforehand.

[0019]It judges whether there is remaining capacity of enough in the recording equipment of 110, and when insufficient, it is with an operation label generator and may be made to emit warning using programming information, since it understands how much after time an applicable program continues beforehand.

[0020]When remaining capacity is insufficient, it may be made to direct to change a recording format of an image automatically and to be settled in remaining capacity to a recording controller. Recording formats here are things, such as a change of a "standard" in VTR, and "3 times", a compression ratio in digital image record, and a frame rate. When information which specifies a program along with broadcast has been sent like VPS of BS digital broadcasting or Germany, it may be made for it to amend program finish time automatically, even when program finish time is beforehand known based on programming information.

[0021]When a programming information input device of 103 shows that organization of a program was corrected, it may be made for the contents of correction to amend recording finish time. An operation label generator of 107 is for laying on top of an image, in order to check to a user the contents of operation currently processed by 106, and displaying the contents. As opposed to urgent recording directions inputted by urgent recording indicating device of 101, . [whether urgent recording was directed on an image screen and recording began normally, and] it is for telling and checking the contents of operation to a user by indicating whether residual time of an applicable program comes out, there is not any shortage in remaining capacity of recording

equipment, or what chosen as a format of recording simultaneous or one by one.

[0022]Although it is for the display device of 108 displaying the video signal outputted from the first tuner of 102, simultaneously, the output from an operation label generator can also be piled up simultaneously, and can be displayed. 109 is a recording controller and controls the recording equipment of 110. The recording controller of 109 may be one as video voice recording equipment of this invention, and may completely control the recording equipment of another exterior by a cable or infrared rays.

[0023]The thing of a actual recording mode which uses magnetic tape is also like [the recording equipment of 110 carries out record reproduction of both a video signal, an audio signal, or either, and] an optical disc. It may not build in this equipment but you may connect as external apparatus. With such video voice recording equipment of composition, recording equipment can be easily set up by operating the urgent recording indicating device of 101 record certainly the program to which it is viewing and listening now till the finish time of the program.

[0024]Since it has the first tuner and second tuner then, the program found with the first tuner can be recorded using the second tuner, and after the end of picture recording setting can carry out what is called back ** that enjoys another broadcast with the first tuner. It may enable it to correct the time by the program finish time determined automatically in an urgent recording directing means, so that finish time may be delayed in preparation for time extension of a sudden program.

[0025]When delaying finish time, restriction may be added so that time extension can be carried out only till the broadcast finish time of that day of the broadcasting station. When delaying finish time, it may enable it to extend finish time like the end time of the following program to the end time pan of the program which makes the unit of time to extend a program, namely, follows the present program.

[0026]When delaying finish time similarly, it may enable it to set up recording finish time so that for example, 15 part grade may add the fixed time unit every from the finish time of the program made applicable [present] to recording. When delaying finish time similarly, it may enable it to set up recording finish time from the finish time of the program made applicable [present] to recording by considering the fixed time unit on the basis of 00 minutes of time as a pause.

[0027]A user may enable it to direct even the change of the "standard" in VTR, and a recording format like "3 times" in an urgent recording directing means. Actually, picture recording processing may not be performed but may be realized as a mere OFF timer function.

[0028](Embodiment 2) A 2nd embodiment of this invention is described below, referring to Drawings. In drawing 2, 201 an urgent recording indicating device and 202 a tuner and 203 A programming information input device, 204 -- a programming information storage device and 205 -- an operation label generator and 208 show a display device, 209 shows a recording controller, and, as for a manipulate signal processing unit and 207, a time measuring device and 206 show recording equipment 210. The urgent recording indicating device of 201 is the same as that [urgent recording] of 101 of drawing 1.

[0029]Although the tuner of 202 carries out the same work as the first tuner of 102 of drawing 1, it is also that restrictions that the function of back ** which serves also as work of the second tuner of 111 of drawing 1, and was described in the first embodiment is unrealizable stick. The programming information input device of 203 is the same as that [programming] of 103 of drawing 1.

[0030]The programming information storage device of 204 is the same as that [programming] of 104 of drawing 1. The time measuring device of 205 is the same as that of 105 of drawing 1. Although the manipulate signal processing unit of 206 carries out the same work as the manipulate signal processing unit of 106 of drawing 1, since there is no second tuner in the first embodiment in this example, the control is unnecessary.

[0031]The operation label generator of 207 is the same as that [operation label] of 107 of drawing 1. The display device of 208 is the same as that of 108 of drawing 1. The recording controller of 209 is the same as that of 109 of drawing 1. The recording equipment of 210 is the same as that of 110 of drawing 1. In this second embodiment, it is what excluded the second tuner from the first embodiment, and by such composition, although the function of back

recording is unrealizable, since it becomes unnecessary to have two tuners, a cost cut, reduction of power consumption, a weight saving, miniaturization, and simplification of a circuit are made.
[0032]

[Effect of the Invention]As mentioned above, by this invention, since the finish time of the program to which it is viewing and listening now using programming information can be set up automatically and setting out of recording finish time is omissible, it can lose that recording goes wrong also to an urgent recording demand.

[Translation done.]

(19)日本国特許庁 (JP) (2)公開特許公報 (A) (11)特許出願公開番号
特開2000-322786
(P2000-322786A)

(3)公開日 平成25年11月24日(2000.11.24)

(5)発明の名
題
映像信号記録装置

(6)発明記号
F1
G 11 B 15/02
H 04 N 5/76
7/05
7/035

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審査請求 未請求 審査項の数2 0 L (全7頁)

(22)出願日 平成11年5月12日(1999.5.12)

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(54)【発明の名稱】 映像信号記録装置

(55)【発明】

【課題】現在視聴している番組を単に録画設定しようとするとその番組の終了時刻を自分で調べ、録画装置に入力する必要があったが、あわてておこうと失敗することがあるという課題があった。

【解決手段】緊急な録画要求に対して、番組編成情報をもらい現在視聴中の放送局と現在時刻から、該当番組の終了時刻を抽出し、録画装置に自動的に録画終了時刻を設定する。

示に基づき、前記チューナーの出力する映像信号と音声信号を記録することを特徴とする、映像信号記録装置。【発明の詳細な説明】

【0001】【技術分野】本発明は、放送を受信し、その内容を表示もしくは記録する装置に関するものである。

【0002】【従来の技術】従来、VTRやVTR一体型テレビなどでは、ほんどの機種に録画機能をもいた、タイマー録画予約機能があり、あらかじめ設定した日時の指定したチャンネルの番組を録画するといったことができるようになっている。また、番組の録画中に急遽録画を中止せざるを得ないとときに急遽録画を開始するための「ワンタッチタイマー」や「簡便予約」などにより視聴を開始する場合もある。

【0003】そのような急な録画を開始するときに、その番組の終了時間を正確に設定するには非常に困難である。番組終了とともに自動的に録画終了する機能もあり、番組終了とともに自動的に録画終了するところである。(特開平9-16739.2)のように、放送方式の変化によって番組の終了を自動的に判別して録画処理を終了するというものがすでに考案されている。以下に従来の映像信号記録装置について説明する。

【0004】図3は、従来の映像信号記録装置の構成を示すものである。図3において、301の緊急録画指示装置はユーザが現在視聴している番組を録画したいと思ったときにとっさに録画を開始することを指示できるようにするための指入手段である。302のチューナーは受信した電波を復調し映像信号と音声信号を出力する。

【0005】303の放送方式検出装置は、放送方式記憶装置305に記憶された放送方式と放送方式検出装置から出力され続ける放送方式を監視し、放送方式が変化したときにその内容を操作信号処理装置304に通知する。操作信号処理装置304では、放送方式が変化するものである。操作信号処理装置304では、放送方式記憶装置305から通知された放送方式の変化の範囲をから出力され続ける放送方式を監視し、放送方式が変化したときにその内容を操作信号処理装置304に通知する。操作信号処理装置304では、放送方式が変化するものである。操作信号処理装置304では、放送方式記憶装置305から通知された放送方式の変化の範囲を

時間307の時刻範囲装置をもちいて計測し、一定時間以上放送方式の異なる状態が維持したときに、放送するための録画制御装置と、前記録画制御装置からの指 50 次の番組へ切り、録画目的の番組が終了したと判断し、

【0006】306の放送方式比較装置では、放送方式記憶装置305に記憶された放送方式と放送方式検出装置から出力され続ける放送方式を監視し、放送方式が変化したときにその内容を操作信号処理装置304に通知する。操作信号処理装置304では、放送方式が変化するものである。操作信号処理装置304では、放送方式記憶装置305から通知された放送方式の変化の範囲を

時間307の時刻範囲装置をもちいて計測し、一定時間以上放送方式の異なる状態が維持したときに、放送するための録画制御装置と、前記録画制御装置からの指 50 次の番組へ切り、録画目的の番組が終了したと判断し、

録画制御装置 3 0 8 を停止するよう指示する。3 0 9
の記録装置は、3 0 8 の録画制御装置の指示に基づき、
チーナ 3 0 2 の出力する映像信号と音声信号を記録す
るものである。

【0012】101の緊急録画指示装置では、男性が視認中の番組を録画したときにその旨を指示するためのものである。これは、具体的には本体の前面あるいはリモコン上に、ひとつつのボタンとして実現することができる。

【発明が解決しようとする課題】しかしながら上記の從来の解説では、現在問題している番組の放送方式が、現在の番組の放送方式と同一の場合には、現在の番組の終了を正しく判定できないため、番組の終了時に録画処理が終しない。あるいは、番組の途中で放送方式が変化する場合などにその録画操作によって番組の途中で放送

の終了判定が番組本来の編成情報ではなく、放送方式の変化に依存するため、誤動作する可能性が多く、ユーザーが安心して使用できるものとは言えない。

【0008】また、番組があと何分続くなるかといったことが数秒間にわたらないため、番組をすべて録画することができないので、容量不足による番組録画に失敗するおそれがあった。本清明は、上記從前の問題点を解決するもので、番組の終了時間まで正確かつ確実に設定でき、そのまま番組を正確に録画することができる映像

【0009】【課題を解決するための手段】本発明の映像音声信号配
線装置は、各放送局毎の番組の放送予定作情報を人手する
装置によって得られた番組配信情報入力装置と前記番組編成情報入力装置
位置によって得られた番組編成情報は蓄積して管掌する番組
編成情報記述装置と、現在の日付と時刻とを計測して通知
することができる時刻表示装置と、前記番組編成情報記
述装置の中央から該当する番組を抽出して、現在緊急画面を
表示する番組の終了時刻を入手し、番組終了時
刻になると、録画削除装置に録画処理を停止するよう
に指示する操作信号を処理装置とを備え、現在視聴してい
る番組の録画を開始するときに、その番組の終了時刻を

置をもちいて警告を発するようにしてもらいたい。

【0015】103の番組編成情報入力装置は、各放送局から放送される予定の番組のスケジュールを入手する実験の実現方法としては、インターネット等のネットワークからダウンロードするようにしてもらいたい、データ放送等から入手し入れてもよい。あるいは、ロービーディスク等の可搬式記憶媒体をもついて、別の機器で入力したものを利用してもらいたい。またキー一ボードやマウスによってユーチャーが能動的に入力してもかわらない。また、ここで入手される番組編成情報には、各放送局ごとの番組の開始時刻もしくは終了時刻が含まれている必要がある。

【0016】103の番組編成情報入力装置は、各放送局から放送される予定の番組のスケジュールを入手する実験の実現方法としては、インターネット等のネットワークからダウンロードするようにしてもらいたい。データ放送等から入手し入れてもよい。あるいは、ロービーディスク等の可搬式記憶媒体をもついて、別の機器で入力したものを利用してもらいたい。またキー一ボードやマウスに付随して番組を特定する情報が送られてきている時にはそれにによって、自動的に番組終了時刻を補正するようにしてもらいたい。

【0017】103の番組編成情報入力装置は、各放送局から放送される予定の番組のスケジュールを入手する実験の実現方法としては、インターネット等のネットワークからダウンロードするようにしてもらいたい。データ放送等から入手し入れてもよい。あるいは、ロービーディスク等の可搬式記憶媒体をもついて、別の機器で入力したものを利用してもらいたい。またキー一ボードやマウスに付随して番組を特定する情報が送られてきている時にはそれにによって、自動的に番組終了時刻を補正するようにしてもらいたい。

【0018】103の番組編成情報入力装置は、各放送局から放送される予定の番組のスケジュールを入手する実験の実現方法としては、インターネット等のネットワークからダウンロードするようにしてもらいたい。データ放送等から入手し入れてもよい。あるいは、ロービーディスク等の可搬式記憶媒体をもついて、別の機器で入力したものを利用してもらいたい。またキー一ボードやマウスに付随して番組を特定する情報が送られてきている時にはそれにによって、自動的に番組終了時刻を補正するようにしてもらいたい。

【0019】103の番組編成情報入力装置は、各放送局から放送される予定の番組のスケジュールを入手する実験の実現方法としては、インターネット等のネットワークからダウンロードするようにしてもらいたい。データ放送等から入手し入れてもよい。あるいは、ロービーディスク等の可搬式記憶媒体をもついて、別の機器で入力したものを利用してもらいたい。またキー一ボードやマウスに付随して番組を特定する情報が送られてきている時にはそれにによって、自動的に番組終了時刻を補正するようにしてもらいたい。

【0020】また、機器容量が不十分な場合には自動的に修正できるようにしてもらいたい。

【0021】また、終了時刻の当日の放送終了時刻に遅延する時間の単位に備考を加えてもらいたい。

【0022】また、番組編成に従く番組の終了時間間というように終了時刻がい。

【0023】また、同時に現在の録画対象としている15分程度の一定時間単位

【0010】 終了させることができるものである。

40 ても良い。
41 している操作内容をユーザーに確認するためには、映像
42 に重ね合わせてその内容を表示するものである。
43 1.0.1の緊急録画指示装置により入力された緊急録画指
44 示に対して、映像画面上に緊急録画が指示され、録画が

40 ても良い。
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42 に重ね合わせてその内容を表示するものである。
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44 示に対して、映像画面上に緊急録画が指示され、録画が

号処理装置、207は操作内容表示発生装置、208は表示装置、209は録画削除装置、210は記録装置を示す。201の緊急録画指示装置は図1の101の緊急録画指示装置と同じものである。

【0029】202のチューナーは図1の102の第一のチューナーと同じ働きをするものであるが、図1の111の第二のチューナーの働きをもつものであり、第一の実施例でのべた実録の機能が実現できないという懸念につくものである。203の番組録成情報入力装置は、図1の103の番組録成情報入力装置と同じものである。

【0030】204の緊急録画指示装置は、図1の104の番組録成情報入力装置と同じものである。205の時刻計測装置は、図1の105の時刻計測装置と同じものである。206の操作信号処理装置は、図1の106の操作信号処理装置と同じ働きをするものである。

【0031】207の番組録成情報記憶装置は、図1の107の番組録成情報記憶装置と同じものである。208の表示装置は、図1の108の表示装置と同じものである。209の録画削除装置は、図1の110の録画削除装置と同じものである。

【0032】210の操作信号処理装置は図1の109の操作信号処理装置と同じものである。201の表示装置は、図1の111の表示装置と同じものである。202の番組録成情報入力装置は、図1の112の番組録成情報入力装置と同じものである。203の時刻計測装置は、図1の113の時刻計測装置と同じものである。204の操作信号処理装置は、図1の114の操作信号処理装置と同じものである。205の操作信号処理装置は、図1の115の操作信号処理装置と同じものである。206の操作信号処理装置は、図1の116の操作信号処理装置と同じものである。207の操作信号処理装置は、図1の117の操作信号処理装置と同じものである。208の表示装置は、図1の118の表示装置と同じものである。209の録画削除装置は、図1の119の録画削除装置と同じものである。210の操作信号処理装置は、図1の120の操作信号処理装置と同じものである。

【0033】以上のように本発明では、番組録成情報用いて男性相談している番組の終了時刻を自動的に設定することができる。そのため緊急録画要求に対しても録画を省略することができる。また、録画削除装置を用いて男性相談している番組の終了時刻を自動的に設定することができる。そのため緊急録画要求に対しても録画を省略することができる。

【0034】【図面の簡単な説明】

【図1】本発明の第1の実施の形態における映像音声記録装置の構成を示す図

録装置の動作を説明するための構成を示す図

【図2】本発明の第2の実施の形態における映像音声記録装置の動作を説明するための構成を示す図

【図3】從来の映像音声記録装置の構成を示す図

【符号の説明】

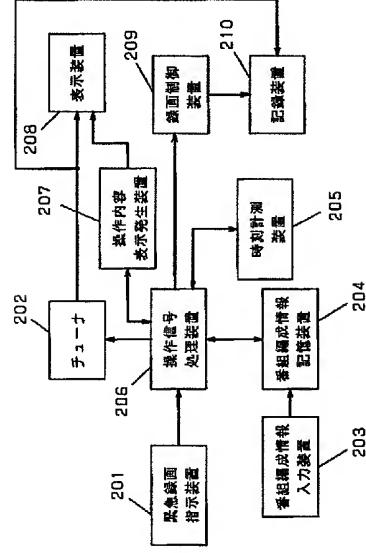
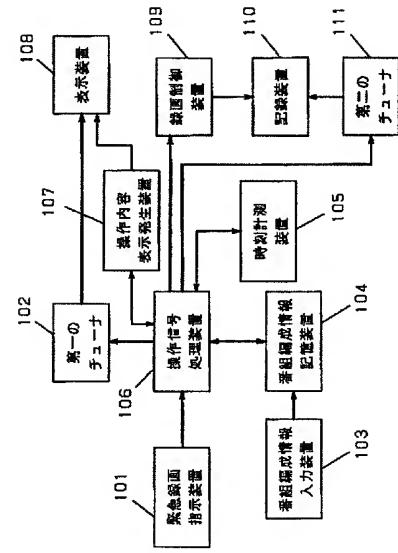
101 緊急録画指示装置
102 第一のチューナー
103 番組録成情報入力装置
104 番組録成情報記憶装置
105 時刻計測装置
106 操作信号処理装置
107 操作内容表示発生装置
108 表示装置
109 録画削除装置
110 記録装置
111 第二のチューナー

201 チューナー
202 放送方式検出装置
203 放送方式記憶装置
204 放送方式比較装置
205 時刻計測装置
206 操作信号処理装置
207 操作内容表示発生装置
208 表示装置
209 録画削除装置
210 記録装置
211 チューナー

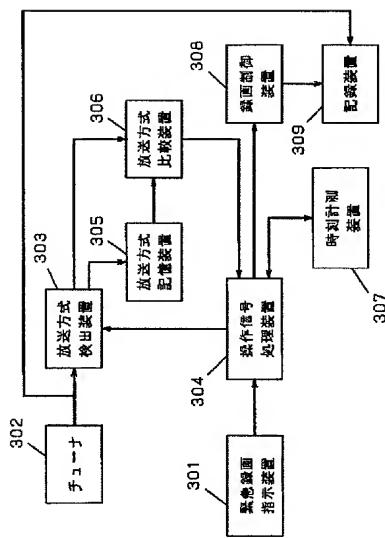
【図1】

【図2】

【図3】



[図3]



フロントページの続き

Fターム(参考)
 56052 AA01 AB04 CG06 DB10 EE02
 EE03
 56063 AA01 AB01 AC01 AC05 AC10
 DA03 DA13 EB33
 56102 AC01 GA02 GA04 GA08 GA39
 GA64